

# EUROPEAN PATENT OFFICE

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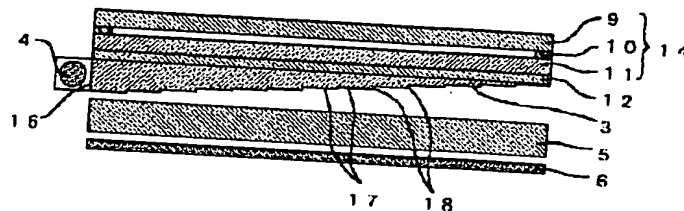
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TITLE : TOUCH PANEL DEVICE INTEGRATED  
WITH FRONT LIGHT



ABSTRACT : PROBLEM TO BE SOLVED: To provide a touch panel device integrated with a front light which can improve the visibility by preparing the device having excellent transmittance for light.

SOLUTION: The device is produced by successively laminating a reflection type liquid crystal display 5, a front light 15 consisting of a transparent light guide plate 3 and a light source 4 disposed on the entrance face 16 for the light which is the end face of the plate 3, and a transparent touch panel 14 on a reflection plate 6. The upper part of the front light 15 and the lower part of the transparent touch panel 14 are laminated with a transparent resin layer 12 interposed. The light guide plate 3 has a whole flat face on the side facing the transparent touch, it has horizontal faces 17 and inclined faces 18 alternately formed on the side facing the reflection type liquid crystal display 5. The incident light entering the entrance face 16 is internally reflected by the horizontal faces 17 and is made to exit outside by the inclined face 18.

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